

## **INTRODUCTION**

### **1. Sugar Lake Division**

The Migratory Bird Conservation Commission approved Erie NWR on March 11, 1958. Establishment of the refuge occurred on May 22, 1959 when the first tract was purchased. Under the original and subsequent approvals, 107 tracts totaling 5,205.96 acres were acquired.

### **2. Seneca Division**

The Seneca Division was approved by the Migratory Bird Conservation Commission on June 6, 1967. Twenty-seven tracts totaling 3,571.46 acres have been acquired. Approximately 888.15 acres remain to be acquired.

The topography of northwestern Pennsylvania resulted from the retreat of the last continental ice age glacier. This hilly country in the upper reaches of the Allegheny River watershed is dotted with numerous lakes, swamps and marshes in association with meandering valley streams.

Historically, the area was an important nesting and resting area for waterfowl using the western portion of the Atlantic Flyway. During the 1800s, intensive logging and farming coupled with the near extinction of the beaver resulted in the loss of much valuable wetland habitat. The corresponding decline in waterfowl use eventually led to the creation of the Erie NWR.

Contrary to the popular belief, the refuge is not on the shores of Lake Erie. As the crow flies, the Seneca Division is 25 miles south and the Sugar Lake Division is 35 miles south of Lake Erie.

The name, Erie, comes from the Erietz Indians. This small tribe resided along the shores of what is now known as Lake Erie. In the mid-17<sup>th</sup> century, the Iroquois Indians defeated the Erietz and the tribe ceased to exist as a distinct group. In 1969, the refuge was officially named after this extinct Erietz Indian Tribe. Unfortunately, the name, Erie, is more closely associated with the area north of the refuge because of Lake Erie, the City of Erie and Erie County. This causes much confusion especially when the public is trying to locate the refuge for the first time.

# HIGHLIGHTS

- ★ Centennial time capsule installed in headquarters
- ★ Junior Duck Best of Show wins National First Place
- ★ Second Annual Kids Fishing Event held May 24
- ★ Mussel survey completed in Muddy Creek
- ★ Invasives Workshop held at refuge
- ★ Storm damage caused by major storm July 21
- ★ Rick Potvin, Patuxent NWR, completes Leadership detail at Erie
- ★ Lynn Greenwalt visits refuge
- ★ Helicopter spraying of non-native invasive phragmites
- ★ Joyce Sliter receives Junior Duck Coordinator award
- ★ Ninth Biennial Nature Photo Contest held in November

## Climatic Highlights

Erie National Wildlife Refuge - 2003				
Month	Temperatures*		Precipitation**	
	<u>Low</u>	<u>High</u>	<u>Snow</u>	<u>Rain</u>
January	47	-13	1.64	33.0
February	47	-4	2.46	36.0
March	73	-6.1	2.36	6.50
April	80	21	2.77	.25
May	79	36	6.49	
June	87	36	2.94	
July	92	46	7.76	
August	90	45	6.08	
September	77	64	6.18	
October	73	15	4.30	
November	81	12	4.14	7.75
December	55	12	3.60	33.50
		<b>TOTALS</b>	<b>50.72</b>	<b>117.0</b>

\*Degrees Fahrenheit

**\*\*inches**

# **1**

## **Monitoring and Studies**

### **1a. Surveys and Censuses**

Jerre Mohler, Lamar Fisheries, conducted a mussel survey in Muddy Creek

### **1b. Studies and Investigations**

# **2**

## **HABITAT RESTORATION**

### **2a. Wetland Restoration: On Refuge**

**Wetland Restoration: Off Refuge**

### **2b. Upland Restoration: On Refuge**

### **2c. Riverine Restoration**

# **3**

## **HABITAT MANAGEMENT**

### **3a. Water Level Management**

### **3b. Moist Soil Management**

### **3c. Graze/Mow/Hay**

Fuel Hazard Reduction monies were received by the refuge this year. A team of volunteers were trained on the farm tractors and brush hog mowers. They mowed approximately 650 acres for the purposes of habitat management, invasive weeds and fuel hazard reduction. In addition, the staff mowed all dikes and service roads that provide limited access for vehicles.

Robert Battin mowed the field east of headquarters entrance road.

F & W Mowing was contracted to mow impoundments slopes.

Robert Battin completed mowing NG-40, which was mowed high rather than a close cut.

Robert completed clearing the property line North of Route 173 to Fowler Road. He also cleared the North end of Sugar Lake Division property line.

### **3d. Farming**

Leigh Bowes - Seneca Division	33.0 acres
Jim Furry - Sugar Lake Division	101.0 acres
Bill Lenox - Seneca Division	5.0 acres
Phil Parker - Sugar Lake Division	50.0 acres
Jon Reese - Sugar Lake Division	95.0 acres
Ed Simcheck - Seneca Division	30.5 acres
Charlie Woolstrum - Sugar Lake Division	<u>13.0 acres</u>

Total acres	327.5 acres
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### **3e. Forest Management**

### **3f. Prescribed Burning**

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The following burns were conducted on the refuge: slash pile at headquarters; NG-49 Reese field; field south of Fowler Road; field behind Quarters 7 on McFadden Road; shrubs north of Pool K

### **3g. Pest Plant Control**

Aerial spraying of non-native invasive phragmites (*Phragmites communis*) was performed by Helicopter Applicators, Gettysburg PA. The contract was in the amount of \$5,500.

Robert Battin completed pesticide training requirements.

Robert Battin removed shrubs from Pool N and Pool B.

Robert Battin removed Japanese knotweed from private land bordering the refuge on Hickory Corners Road, the north end of Sugar Lake Division.

Robert Battin treated purple loosestrife in Pool B.

## **4**

# **FISH AND WILDLIFE MANAGEMENT**

### **4a. Bird Banding**

The Pennsylvania Game Commission conducted dove banding on the refuge.

### **4b. Disease Monitoring and Treatment**

### **4c. Reintroductions**

### **4d. Provide Nest Structures**

The bluebird monitoring program is conducted by volunteer Gary Sliter.

<b>2003 Bluebird Nesting Season Results</b>	
Eggs Laid	179
Hatched	150
Fledged	103

Staff completed the inspection of wood duck boxes on the refuge. **(PHOTO)**

**4e. Pest, Predator and Exotic Animal Control**

## **5**

### **COORDINATION ACTIVITIES**

**5a. Interagency Activities**

Robert Battin completed a temporary detail for Ecological Services for Ecopian bog turtle restoration.

**5b. Tribal Coordination**

**5c. Private Land Activities (excluding restoration)**

**5d. Oil and Gas Activities**

**5e. Cooperative/Friends Organizations**

## **6**

### **RESOURCE PROTECTION**

**6a. Law Enforcement**

**6b. Permits & Economic Use**

**Trapping**

Bids were received from 13 individuals for 17 trapping units on the refuge. Awards totaling \$879.35 were made as follows:

Area A	Todd McIver	\$131.99	
Area B	Andy Hyde	33.50	
Area C	Tom Wentworth	45.50	
Area D	James Kull	117.00	
Area E	Gerald Lang	28.01	
Area F	Not awarded		
Area G	Dave Fowler	27.79	
Area H	Joan Terrill	40.25	
Area I	Not awarded		
Area J	Tom Terrill		86.50
Area K	Duane Russ	40.01	
Area L	Jim Foulk	127.50	
Area M	Paul Crowell		35.00
Area N	Tom Yusavage	106.00	
Area O	Byron Russ	60.30	
Area P	Not awarded		
Area Q	Not awarded		

Following is the total harvest on all units:

Beaver	61	
Carp		1
Coyote	1	
Grey Fox		1
Mink		23
Muskrat	283	
Raccoon		85
Opossum		34
Red Fox		7

#### **6c. Contaminant Investigations**

#### **6d. Contaminant Cleanup**

#### **6e. Water Rights Management**

#### **6f. Cultural Resources**

## **6g. Land Acquisition Support**

# **7**

## **PUBLIC EDUCATION AND RECREATION**

### **7a. Provide Visitor Services**

#### **Scouting**

#### **Fishing**

The second annual “Take Me Fishing” event was held on Saturday, May 24, 2003 with a total of 62 participants (42 anglers, 5 staff, 15 volunteers). Volunteer Megan Kaputa coordinated the event as her high school senior project. The PA Fish and Boat Commission participated with its SMART Angler Program, which focused on fishing ethics and safety. After that program in the visitor contact station, all participants went fishing at Pool K. A catered lunch was served, after which prizes and certificates were awarded to all participants. **(PHOTOS)**

#### **Hunting**

#### **Trails**

The YCC enrollees placed wood chips on Tsuga Trail.

#### **Wildlife Observation**

#### **Visitation**

### **7b. Outreach**

Judging for the PA Junior Duck Stamp Design Contest was held at Erie NWR on April 1. Nathan Bauman won Best of Show with a pair of green winged teals titled “Nate’s Ducks.” Judges for the competition were: Lew Walker, Gerry Putt, Joan Howlett, Todd Sampsell and Jack Paluh. **(PHOTO)**



Nathan's entry also won First Place in the National competition at Ocean City, Maryland. Coordinator Joyce Sliter was present at Nationals to view the judging. **(PHOTO)**

Joyce traveled to Washington D.C. in November to accept an award as First Place Coordinator and to view the adult National Duck Stamp competition at the Department of Interior. **(PHOTO)**

## 8

### PLANNING AND ADMINISTRATION

#### 8a. Comprehensive Management Planning

#### 8b. General Administration

Robert Battin attended Collateral Duty Safety Officer training at Great Swamp NWR and OSHA training at Erie, PA.

John Stasko, Refuge Supervisor-South for Region 5, visited Erie NWR on April 29. **(PHOTO)**

Megan Natali, Allegheny College student, completed an internship performing computer projects including a slide program on Erie NWR.

#### **Funding 2003**

1261	Base operations	\$375,087.00
1261	RONSO2 Implement Hab Mgt	3,577.00
1261DATA	Surveys & Invasives	2,420.00
1261FSEV	Enhance accessible fishing	20,500.00
1261FSEV	Fishing Event	1,100.00
1261CHET	Ecosystem Team Funding	4,400.00
1262A5EE	Annual Maintenance	28,900.00
1262Y5EE	YCC Program	22,350.00
12625090	Replace radio system	110,900.00
1262D5EE	Rehabilitate office garage	51,100.00
1262B5ER	Rent excavator dor dike rehab	17,500.00
9263	Erie Grasslands	<u>15,900.00</u>
Total		\$653,734.00

## **Personnel**

The following is a list of employees who were members of the staff of Erie NWR in 2003:

<b><u>Permanent Full Time</u></b>	<b><u>Grade</u></b>	<b><u>EOD Date</u></b>	<b><u>Departure Date</u></b>
Jeff Haas, Refuge Manager	GS-13	09/09/2001	
Norma Lynn Kline, Biologist	GS-11	11/03/2002	
Joyce E. Sliter, Office Assistant	GS-6	02/12/1989	
Robert E. Battin, Maint. Mechanic	WG-9	03/14/1977	
Jeff Enlow, Maint & LE Officer	WG-8	01/13/2002	
Donald E. Stover, Eng Equip Operator	WG-8	03/21/1993	

## **Temporary STEP Appointment**

Sarah Armstrong, Clerk	GS-3	06/15/2001
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## **Temporary Appointment**

Andrea Drayer, Bio Tech	GS-5
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## **Temporary Group Leader**

Luke Randall	GS-5	06/11/2000
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## **Temporary YCC Enrollees**

## **Volunteers**

C. Kent Armstrong	James Kaputa
Mark Bowers	Megan Kaputa
Tami Campbell	James E. Kirby
Frank Dashner II	Lisa Kiwak
Andrea Drayer	Chris Lundberg
Daniel Drayer	James P. McCarl
Jodie W. Fait	John L. McCarl
Amanda Grey	Megan Natali
Deidre Haas	Robert Pollard
Leslie Horne	Jack Paluh
Joan Howlett	Gerry Putt
Rick James	Richard Raup
Susan James	Todd Sampsell

Gary Sliter  
Lawrence Smith  
Diane Sutton  
John Tautin

Joshua VerHague  
Margaret Voss  
Lew Walker  
Ramona Walls

Robert Battin constructed an Adirondack chair in memory of volunteer Howard Gordon. Howard passed away March 7, 2001. The chair was placed in the yard at the headquarters overlooking the bird observation area. An engraved ceramic tile was imbedded in the back of the chair in commemoration of Howard. **(PHOTO)**

### **Equipment and Facilities**

During the week of July 21, 2003 a major storm moved through northwest Pennsylvania causing severe flooding throughout Crawford County. The most substantial damage the refuge sustained was major rutting in a heavily used parking lot, a failure of a culvert system blocking use of a service road, blow out of a dike on an approximately 1-acre impoundment, and other miscellaneous damages including a leaking roof through loss of shingles at an occupied refuge residence. Descriptions of the damages and cost estimates to repair them are listed below:

#### **Pool H Parking Lot**

Damage: The flood water scoured out a large portion of the surface material at the entrance of the lot (approximately 12 by 30 feet) effectively closing a point of access to a 3-mile long public use trail. The depression created could severely damage vehicles if attempts were made to drive through the impacted area.

Solution: Install culvert and grade-in approximately eight loads of 2B bank run gravel at the entrance and to other areas of the parking lot that received less damage.

Cost: \$5,000.00

#### **Pool B Road**

Damage: The storm damaged a culvert system on the Pool B access road to the point it is no longer safely passable. The access road is the access point into two major impoundments and a large grassland complex. The road is used by refuge staff for daily management activities and provides emergency access for fire and law enforcement personnel.

Solution: Dig out and replace existing culvert with larger diameter culvert or concrete ford. Rip-rap would be placed on both the upstream and downstream side to prevent erosion in case of another storm at the same or greater magnitude.

Cost: \$8,500.00

#### **Fowler Road Pond**

Damage: The flood waters undermined the entire dike structure before finally breaching the middle section of an approximate 200-foot dike of a refuge impoundment. The damage was so severe that the total reconstruction of the dike would be required to effectively address the damage resulting from the flood.

Solution: The existing base of the entire dike would be reconstructed to a 3:1 slope and a new water control structure would be installed to minimize the chance of the event reoccurring in

the future. Furnish, place embankment fill/clay to include equipment rental, labor, fuel and material, reclamation of disturbed areas, archaeological survey and engineering.

Cost: \$45,000.00

#### Miscellaneous Damage

Damage: Flood waters and high winds caused minor damage in several areas throughout the refuge. The damage consists of minor scouring of road surfaces, superficial washing out of dikes in several areas and the loss of shingles resulting in a leaking roof in two areas of an occupied residence.

Solution: Tailgate spread and grade-in approximately seven dump truckloads of 2B bank run gravel material and replace the roof on the occupied residence.

Cost: \$14,000.00

A vault toilet was installed by the maintenance staff near Pool 9/Pool K/Deer Run Trail parking lot for use by visitors. **(PHOTO)**

A new water pump was installed at Quarters 7.

Gravel was placed on the road between the maintenance shop and YCC building.

New plumbing and sewer line were installed at the YCC building.

Concrete ramps and a new gate were completed at the Butler building. **(PHOTO)**

YCC group placed new wood chips on Tsuga Trail.

A Centennial time capsule was installed in the headquarters. **(PHOTO)**

New vinyl flooring was installed in the headquarters lobby. **(PHOTO)**

New utility trailer purchased and outfitted with tool chests **(PHOTO)**

## FEEDBACK